Inquiry into: The Density of Substances

Introduction: Properties of substances are used to define and identify the substances. In this lab you will determine the density of several pure substances. Some are metals and some are non-metals. Since density involves mass and volume you will need to measure both the mass and volume of the substances and then use those to calculate the density.

You will work with your lab team to

1. Write the procedure that you will follow to find out the density of your samples.

2. Design a data table that includes all the data you measure as well as the density that you calculate.

3. Research the published density for your samples and calculate your percent error.

4. Do the lab!

5. Graph your data

6. Write up the lab report.

Materials:

Metal samples (4), Glass , Rubber, Unknown

Overflow Can

100mL graduated cylinder

Digital Balance

Here’s what you need to put into your lab write-up

Objective: What do you think the goal of today’s lab is?

Procedure: Step by Step “recipe” for today’s lab

Data Table: Make sure it’s titled and that you use appropriate units

Calculations: Example of your calculations.

Density

Percent Error